



NEWS RELEASE
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 OTCQX:NFUNF
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Nuclear Fuels Continues Successful Drill Program at Kaycee Project, Wyoming

Vancouver, British Columbia, December 7, 2023 – Nuclear Fuels Inc. (CSE:NF OTCQX:NFUNF) (“Nuclear Fuels” or the “Company”) announced continuing positive results from its on-going drill program at its Kaycee Uranium Project in Wyoming’s Powder River Basin. 11 holes are reported with depths ranging from 350 to 600 feet. 5 holes returned uranium grades and thicknesses which are suitable for In-Situ Recovery (“ISR”) extraction technology. Grade thicknesses (“GT”) over the economic cutoff of 0.3 ranged from 0.41 to 1.216 in the 5 holes with anomalous mineralization detected in 9 of the 11 holes. Favorable weather conditions in Wyoming and drilling success at the historic Saddle Zone have resulted in an extension of the 2023 drilling program.

Highlights:

- Uranium mineralization with typically ore-grade Grade Thickness (“GT”) was encountered in the lower Wasatch Formation in 5 drill holes with GT ranging from 0.410 to 1.216;
- The highest-grade single intercept, and the thickest intersection was 6.5 feet of 0.187% eU₃O₈ with a GT of 1.216. A GT of over 0.3 which is considered an economic minimum for inclusion in a typical wellfield in the Power River Basin;
- Phase 1 drilling continues to successfully confirm and expand historic resources of the Saddle Zone hosted in the Lower Wasatch Formation at depths of 165 to 350 feet in saturated sands;
- Drilling continues at the Saddle deposit, targeting both the shallow Lower Wasatch and the newly discovered upper Fort Union sands mineralization.

To view Kaycee Uranium Project maps please visit: <https://bit.ly/41cQsFX>. To view the Kaycee uranium drill program video please visit: <https://youtu.be/tEzFHZJugd8?si=BSXyS2ortz5ZF86c>.

Michael Collins, Chief Executive Officer, stated: “We continue to make remarkable progress on our first drill program having already exceeded our season objective of 50 holes through 2023. We look to continue drilling as long as the weather holds and look forward to reporting additional results in the coming weeks.”

Table of Significant Results

Hole ID	From (ft)	Thickness (ft)	Ave. Grade (%eU ₃ O ₈) ⁽¹⁾	GT (grade x thickness) ⁽²⁾	Host Formation
SD23_051	287.5	5	0.082	0.410	Wasatch
SD23_052	278.5	6.5	0.187	1.216	Wasatch
SD23_053	257.5	3.5	0.172	0.602	Wasatch
SD23_054	270.5	4	0.218	0.872	Wasatch
SD23_057	283.5	0.5	0.021	0.011	Wasatch
SD23_060	276.5	1.5	0.021	0.032	Wasatch

SD23_061	290.5	5.5	0.107	0.589	Wasatch
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Drill holes are reported that returned significant zones of uranium mineralization with >2 ft thickness at or above a grade cut-off of 0.02 per cent eU₃O₈. ⁽¹⁾ % eU₃O₈ is a measure of gamma intensity from a decay product of uranium and is not a direct measurement of uranium. Numerous comparisons of eU₃O₈ and chemical assays of Powder River Basin core samples indicate that eU₃O₈ is a reasonable indicator of the actual uranium assay. ⁽²⁾ Grade Thickness, or GT, is defined as the product of the mineral grade multiplied by the thickness of the mineralization. Bold type represents potentially ISR recoverable uranium with a Grade Thickness of >0.3 which is considered suitable for inclusion in a wellfield.

Kaycee Uranium Project, Wyoming

The Kaycee Project in Wyoming’s Powder River Basin (“PRB”), Nuclear Fuel’s priority project, consisting of over 42 square miles of mineral rights over a 33-mile mineralized trend and 110 miles of identified roll fronts. The Kaycee Project is believed to be the only project in the PRB where all three known historically productive sandstone formations (Wasatch, Fort Union, and Lance) are mineralized and potentially accessible for ISR extraction. The Kaycee Project, under Nuclear Fuels, represents the first time since the early 1980’s that the entire district is controlled by one company.

Nuclear Fuels acquired the Kaycee Project from enCore Energy Corp., which retains a back-in right for 51% of the project by paying 2.5X the exploration costs and carrying the Kaycee project to production (costs recoverable from production) upon Nuclear Fuels establishing a minimum 15 million pound U₃O₈ 43-101 compliant resource.

Wyoming is a proven and prolific uranium producer with a pro-energy government and established regulatory regime for the permitting and extraction of uranium through ISR technology. As Wyoming is one of the few “Agreement States” where the federal government and the Nuclear Regulatory Commission have ceded regulatory authority to the state government, permitting and advancing uranium projects is more efficient and streamlined as compared to most other states. Wyoming, with over 250 million pounds of historic production, ranks as the state with the second most uranium production to date; most of which has been through the ISR method since 1990; predominantly from the PRB.

The technical content of this news release has been reviewed and approved by Mark Travis, CPG., a contractor to the Company, and a Qualified Person as defined in National Instrument 43-101.

About Nuclear Fuels Inc.

Nuclear Fuels Inc. is committed to aggressive exploration of district-scale In-Situ Recovery (“ISR”) uranium projects in proven and prolific jurisdictions. Focused on its priority Kaycee Project, located in Wyoming’s Powder River Basin, our goal is to advance the project onto a path to production. enCore Energy Corp. maintains the right to back-in to 51% ownership by paying the Company 2.5X its exploration expenditures and carrying the project to production (recoverable from production). With existing historic resources through a 33-mile trend, 110+ miles of mapped roll-fronts and 3,800 drill holes, Nuclear Fuels has secured the district under one company’s control for the first time since the early 1980’s. Nuclear Fuels also provides a unique model for development of our other uranium projects and has established a pipeline of future opportunities in known uranium jurisdictions. Our industry leaders work to build America’s uranium resources and provide a domestic fuel for nuclear energy; always on, always available. ISR technology extracts uranium in a non-invasive process through the use of groundwater and oxygen, coupled with a proven ion exchange process, to recover the uranium.

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The Canadian Securities Exchange has not reviewed this press release and does not accept responsibility for the adequacy or accuracy of this news release.

Certain information in this news release constitutes forward-looking statements under applicable securities laws. Any statements that are contained in this news release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as “may”, “should”, “anticipate”, “expect”, “potential”, “believe”, “intend” or the negative of these terms and similar expressions. Forward-looking statements in this news release include, but are not limited to, statements relating to planned exploration programs and the results of additional exploration work in seeking to establish mineral resources as defined in NI43-101 on any of our properties. Forward-looking statements necessarily involve known and unknown risks, including, without limitation, risks associated with the completing planned exploration programs and the results of those programs; the ability to access additional capital to fund planned and future operations; regulatory risks including exploration permitting; risks associated with title to our mineral projects; the ability of the company to implement its business strategies; and other risks including risks contained in documents available for review at www.sedar.com under the Company’s profile. Readers are cautioned not to place undue reliance on forward-looking statements as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement.